Children's Environmental Health

Overview

Children make up 26 percent (70.4 million) of the U.S. population and 100 percent of our future.[1] In Kentucky, children numbered 994,818 or 24.6 percent of the state's population in 2000.[2] Protecting our children has long been a national and state priority and much progress has been made over the years. Technological and treatment advances have significantly curtailed the death of children from infectious diseases such as pneumonia, influenza, tuberculosis and diphtheria from 61.6 percent in 1900 to 2 percent in 1998.[3]

While children are now better protected with the advancement of vaccines and medicines, they are still subject to a number of health risks associated with injuries, environmental toxins, family violence, birth defects, cancer and development disorders. Birth defects and cancer are now the leading cause of death for children under nine years of age.[4] The role environmental pollutants play in these and other childhood diseases has received increased attention and has driven a number of scientific studies in recent years. Researchers have linked air pollutants to childhood asthma, cancers, learning disabilities and birth defects. Studies have also linked development disorders in children with exposures to lead, mercury and PCBs. The total economic costs to society for childhood diseases with links to environmental pollutants is estimated to be $54.9 billion.[5]

Kentucky's children face a myriad of environmental health hazards including radon, solvents, asbestos, mercury, arsenic, sulfur dioxide and ozone, to name a few. They fall into categories such as neurotoxins (certain pesticides and solvents, mercury, lead), endocrine disrupters (PCBs, dioxin), carcinogens (radiation, asbestos, arsenic, dioxin) and respiratory irritants/inflammatants (sulfur dioxide, ozone). Any child can be affected by environmental hazards, however, low-income families are likely to be at a greater risk for environmental diseases. For example, children from low-income families are eight times more likely to have high lead blood levels than those from higher income families.[6] These families are more likely to live in substandard housing and in polluted communities, increasing their risk of childhood lead poisoning, asthma, cancer and other diseases. In Kentucky, more than one in five children lives in a family with income below the federal poverty line.[7]

Protecting the health of our children will require that we work to better understand the relationship between environmental conditions and health outcomes. The Kentucky Environmental Quality Commission's ***Children's Environmental Health Indicators and more detailed county data contained in the CD-Rom supplement to this report*** (found on the back page) is intended to provide a snapshot of children's health and potential relationships to the environment in order to promote a greater state dialogue on environmental health in Kentucky.

Kentucky's Children

	1980	1990	2000
Total State Population	3,660,777	3,685,296	4,041,768
under age 18	1,082,730	954,094	994,818
under age 5	282,731	250,341	265,901
under age 18 living in poverty	235,528	234,012	203,547

5 year trends	**1980-84**	**1988-92**	**1996-00**
Kentucky Births	281,141	266,218	268,782
Infant mortality rate*	12*	9*	7*
Child death rate**	36**	32**	24**

**deaths under age 1 per 1,000 live births. **deaths ages 1 to 14 per 100,000.*
Source: U.S. Census, Kentucky KIDS COUNT 2002 Data Book.